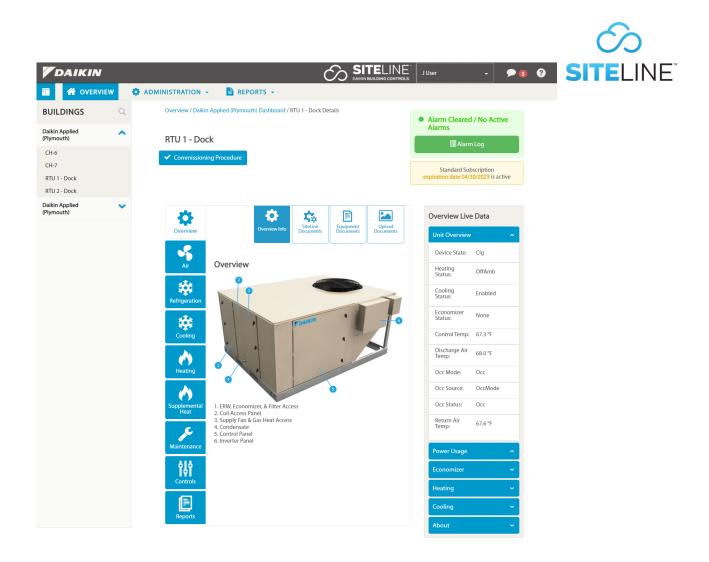


Operation and Maintenance Manual

OM 1341

Group: Controls Part Number: OM 1341 Replaces: OM 1241-3 Date: May 2022



SiteLine[™] Cloud Interface

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Revision History

Literature Number Release Date OM 1341 May 2022

Reference Documents

| Number | Title | Source |
|---------|---------------------|-----------------------|
| IM 1332 | Installation Manual | www.daikinapplied.com |
| OM 1254 | Operation Manual | www.daikinapplied.com |

Action

Initial releases

Limited Warranty

Consult your local Daikin Representative for warranty details. To find your local Daikin Representative, go to <u>www.DaikinApplied.com</u>.

Notice

Daikin Applied reserves the right to change any information contained herein without prior notice. The user is responsible for determining whether this product is appropriate for his or her application.

Product Description

SiteLine [™] by Daikin, consisting of SiteLine for Dedicated Equipment and SiteLine for Pre-Programmed BAS, provides facility and equipment management, monitoring, control, analysis, and decision-making via secure, cloud communications that capture, analyze and deliver equipment information and third party content (i.e. - weather, utility, and CRM data), to a user device (smart phone, tablet, PC, etc.). The cloud connection may use wireless technologies (cellular, Wi-Fi) or a local area network (LAN).

SiteLine consists of two elements: the hardware components necessary to communicate with equipment and deliver data to the cloud, and the Software as a Service (SaaS) subscription necessary for retrieving that information from the cloud. SiteLine for Dedicated Equipment communicates with individual HVAC units directly using on-board communication protocols and SiteLine for Pre-Programmed BAS communicates with multiple HVAC units using BACnet MS/TP.

SiteLine for Dedicated Equipment hardware components consist of the following: one Internet of Things (IoT) Gateway and accompanying Power Supply, one or two Antenna(s), one optional Energy Management Module (EMM) with three accompanying Current Transformers (CT's). SiteLine for Pre-Programmed BAS hardware components consist of the following: one Linux® PC with integrated touch-screen display and accompanying Power Supply.

SiteLine allows the user to view unit statuses, modes, temperatures, pressures and setpoints, and adjust modes, operation and temperature setpoints. Messages and alarms can be viewed, acknowledged and cleared. User accounts are role-based, and user interaction, including setpoint changes and clearing of alarms, is logged for later reporting. System updates can be delivered automatically from the cloud. Built-in trending tools provide easy access to unit performance history. Additionally, SiteLine for Dedicated Equipment can provide the opportunity of real-time power monitoring of individual equipment.

Hazard Identification Messages

Recognize Safety Symbols, Words and Labels

The following symbols and labels are used throughout this manual to indicate immediate or potential hazards. It is the owner and installer's responsibility to read and comply with all safety information and instructions accompanying these symbols. Failure to heed safety information increases the risk of property damage and/or product damage, serious personal injury or death. Improper installation, operation and maintenance can void the warranty.

Cautions indicate potentially hazardous situations, which can result in personal injury or equipment damage if not avoided.

Static sensitive components. Can cause equipment damage.

Discharge any static electrical charge by touching the bare metal inside the control panel before performing any service work. Never unplug cables, circuit board terminal blocks, or power plugs while power is applied to the panel.

🖄 WARNING

Warnings indicate potentially hazardous situations, which can result in property damage, severe personal injury, or death if not avoided.

\land DANGER

Dangers indicate a hazardous situation which will result in death or serious injury if not avoided.

Electric shock hazard. Can cause personal injury or equipment damage.

This equipment must be properly grounded. Connections and service to the MicroTech III Chiller or Rooftop Unit Controller must be performed only by personnel knowledgeable in the operation of the equipment being controlled.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with this instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his or her own expense. Daikin disclaims any liability resulting from any interference or for the correction thereof.

Initial Login

Users are granted access to units in the SiteLine user interface by Administrators. Administrators are generally assigned at the time of the SiteLine order but can be added at any time by an existing Administrator. Upon initially being given access to one or more pieces of equipment, the user will receive an e-mail directing him or her to login to the system for the first time (Figure 1). Clicking the link in the e-mail notification brings the user to the user license agreement (Figure 2 on page 6). The license agreement acceptance checkbox can only be checked once the entire acceptance agreement has been viewed by scrolling to the bottom of the pop-up message. After doing this, clicking the 'Accept' button prompts the user to create a password (Figure 3 on page 6). The password should be entered, then confirmed. Clicking the 'Save' button sets the new password.

Figure 1: E-Mail Invitation

| Dear Us | ser, |
|--|--|
| Welcom | ne to the SiteLine™ website. |
| You hav | ve been given Standard access to SiteLine with the following Daikin equipment available: |
| 1 | 1. Address: 13600 INDUSTRIAL PARK BLVD, MINNEAPOLIS MN, 55441 United States Unit Tag: CH-7 Serial Number: STNU180600222 |
| 2 | 2. Address: 13600 INDUSTRIAL PARK BLVD, MINNEAPOLIS MN, 55441 United States Unit Tag: CH-6 Serial Number: STNU180600223 |
| 3 | 3. Address: 13600 INDUSTRIAL PARK BLVD, MINNEAPOLIS MN, 55441 United States Unit Tag: RTU 2 - Dock Serial Number: FBOU170900357 |
| 4 | 4. Address: 13600 INDUSTRIAL PARK BLVD, MINNEAPOLIS MN, 55441 United States Unit Tag: RTU-9 (DAA PLY) Serial Number: FBOU170900356 |
| | is link to access the SiteLine™ website: <u>https://siteline.daikinapplied.com/Account/Initiation/68d7a2ce-6e15-4930-a564-</u> 27a551 |
| Note! Th | he link will expire within 60 days. |
| For add | itional information, please, contact our SiteLine™ Customer Support team at <u>866-462-7829</u> |
| Thank y SiteLine Daikin A 866-462 www.Da | ə Team Applied |

NOTE: Internet Explorer is not supported. Please use an alternative browser, such as Chrome[™], Safari® or Firefox.

Figure 2: License Agreement

License Agreement

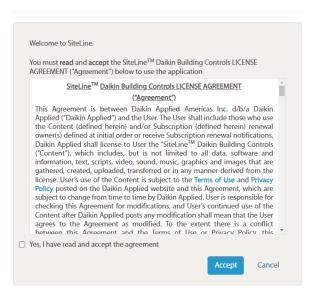


Figure 3: Setting a Password at Initial Login

Set Password

| Please, set pa | assword below | v | | |
|----------------|---------------|---|--|--|
| Password | | | | |
| ð | | | | |
| Confirm Pass | word | | | |
| | | | | |
| | | | | |

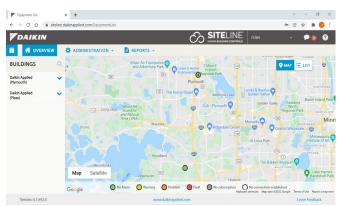
On only the first login to the SiteLine user interface, the user is asked to confirm their Account Information (Figure 4). All information should be verified and modified as necessary. Some fields, noted by a red asterisk, are required, and must have data entered before proceeding. Clicking, 'Confirm', takes the user to the Overview screen (Figure 5).

On subsequent logins, the user should type <u>https://siteline.</u> <u>daikinapplied.com</u> into a web browser and press the enter key. After entering login information, the user will be taken directly to the Overview screen.

Figure 4: Confirm Account Information

| Please, confirm that provided account information | ation is correct. | |
|---|-----------------------|---|
| Personal Information | | |
| First Name * | | |
| Middle Name | | |
| Last Name * | | |
| Contact Information | | |
| Cell Phone | | |
| Work Phone | | |
| Country * | Select Country | ~ |
| Street Address * | | |
| City * | | |
| State/Province | Select State/Province | ~ |
| Zip/Postal Code | | |
| Organization Information | | |
| Name* | | |
| Phone Number | | |
| Country * | Select Country | |
| Street Address * | Seccedarity | |
| City* | | |
| | | |
| State/Province Zip/Postal Code | Select State/Province | ~ |

Figure 5: Overview Screen



User Profile Menu

Within the SiteLine user interface, the User Profile menu will always appear in the upper-right corner of the screen. Several items appear in this menu (Figure 6), allowing the user to perform specific tasks. Each of these tasks are described in the subsequent section.

Figure 6: Profile Menu



Profile

Selecting 'Profile', under the User Profile button, displays Account Information (Figure 7) and allows for changing personal information, address information, organizational information, and passwords. All required parameters are noted with a red asterisk. After making the desired changes, the 'Save' button must be clicked before they take effect. A confirmation message appears at the top of the screen to confirm the saved changes. Clicking the 'Overview' icon or the 'Daikin' logo returns the user to the Overview screen.

Figure 7: Account Information

Account Information

| Personal Information Organ | ization Information Change Password |
|----------------------------|-------------------------------------|
| | |
| Personal Information | |
| First Name * | l |
| Middle Name | |
| Last Name * | User |
| Contact Information | |
| Cell Phone | |
| Work Phone | (763) 553-5330 |
| Country * | United States |
| Street Address * | 13600 Industrial Park Blvd |
| City * | Minneapolis |
| State/Province | Minnesota 🗸 |
| Zip/Postal Code | 55441 |
| | Save Cancel |

Settings

Selecting 'Settings', under the User Profile menu, allows the user to choose units of measure for the display, create and modify alarm schedules, and create and modify maintenance schedules.

On the 'Measurement Units' tab (Figure 8), choose English or Metric units of measure for display within the user interface. Changes do not take effect until the "Save' button is clicked.

Figure 8: Measurement Units Tab

Settings

| Measurement System Alarms Schedu | Maintenance Schedules | |
|----------------------------------|-----------------------|------|
| Measurement System | English Units | ~ |
| | | Save |

Selecting the 'Alarm Schedules' tab allows the user to set schedules for alarm notification from units. The user can select the default alarm notification settings or create a new schedule. Once the 'Create New Schedule' button is clicked, the user chooses a name for the schedule, when each category of alarms will be sent, when unacknowledged active alarms will be escalated to all users, and which units will use the new alarm schedule (Figure 9). After entering the desired information, click 'Create'.

NOTE: Notification frequency and escalation settings apply to all units using the alarm schedule and to all users with access to the units using the alarm schedule. If a user wishes to not receive alarm notification e-mails for a specific alarm category within an alarm schedule, selecting the 'Unsubscribe Me' checkbox will disable notifications for that category. Other users will continue to receive notifications for units using the alarm schedule.

Figure 9: Create New Alarm Schedule

Settings

| Name* | C | | | |
|--|----------------|---|----------------|---|
| Name * | West Units | | | |
| | Notify | | Escalate After | |
| Warning | Immediately | ~ | Never | ~ |
| | Unsubscribe me | | | |
| Problem | Immediately | ~ | Never | ~ |
| | Unsubscribe me | | | |
| Fault | Immediately | ~ | Never | ~ |
| | Unsubscribe me | | | |
| Communication error to unit controller | Immediately | ~ | Never | ~ |
| | Unsubscribe me | | | |
| Gateway communication failure | Immediately | ~ | Never | ~ |
| | Unsubscribe me | | | |
| Applied to Units | | | | |

Selecting the 'Maintenance Schedules' tab allows the user to select the maintenance notification schedule to apply to their units (Figure 10). Maintenance notifications are reminders sent to the user's email. The user can choose to apply the same schedule to all units or apply different schedules. Once the desired settings are made, clicking the 'Save' button applies the changes to the units.

NOTE: Unlike alarm notification settings, maintenance notification settings are distinct for each user.

Figure 10: Maintenance Schedules

| | les Maintenance Schedules | |
|---------------------------|---------------------------|------------------------|
| () * Default means Never. | | |
| All Units | | |
| New schedule | Default* v | Apply to Al |
| | | |
| Units | | |
| nit Tag | Current schedule | New schedule |
| int ing | | |
| | Never | Never |
| CC-1 10-AHU-12 | Never Default * | Never ~ Default * ~ |

Help Menu

Selecting 'Help Menu', under the User Profile menu, provides the user access to several SiteLine instructional documents, videos and release notes (Figure 11). These same materials can also be accessed by clicking the Help icon (Figure 12) in the upper-right corner of the SiteLine user interface.

Figure 11: SiteLine Help Tabs



Log Out

Selecting 'Log Out', under the User Profile menu, logs the user out of the current session and returns to the SiteLine login page.

System Messages

Clicking the 'Messages' button lists the most recent messages and alarms for all units to which the user is assigned (Figure 13). The button itself indicates the number of unread user messages. The user is provided the option to click a link to view the target unit. Additionally, clicking the 'My Messages' link at the top of the message list opens the Messages screen, which displays a comprehensive list of all user messages (Figure 14). By default, the list is sorted in time order, with the most recent message at the top of the list. Clicking the category header will resort the list based on that category. Clicking the message 'Type' field opens the message in a separate pop-up window (Figure 15). Closing the pop-up message automatically marks the message as read within the message list. Clicking the 'Overview' icon or the 'Daikin' logo returns the user to the Overview screen.

Figure 13: Messages

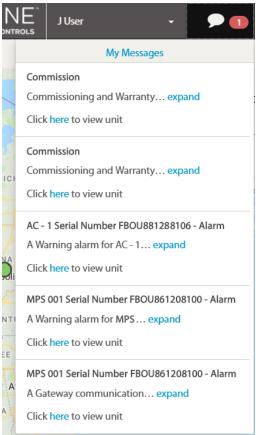
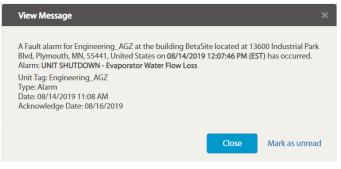


Figure 14: Message List

🖻 Mark All as Read

| | Unit Tag | Туре | Date\Time | Message | Acknowledge Date |
|---|-----------------|-------|---------------------|---|------------------|
| | Engineering_AGZ | Alarm | 08/14/2019 11:08 AM | A Fault alarm for Engineering_AGZ at the building BetaSite located at 13600 Industrial Park Blvd, Plymouth, MN, 55441, United States on 08/14/2019 12:07:46 PM (EST) has occurred. Alarm: UNIT SHUTDOWN - Evaporator Water Flow Loss | 08/16/2019 |
| • | Main Office_AWV | Alarm | 08/13/2019 06:53 PM | A Fault alarm for Main Office_AWV at the building BetaSite located at 13600 Industrial Park Blvd, Plymouth, NN, 55441, United States on 08/13/2019 06:52:27 PM (CST) has occurred. Alarm: COMP SHUTDOWN - Oil Feed Pressure Sensor Fault Circuit #1, Comp #1 | 08/16/2019 |
| • | RTU-1 | Alarm | 08/10/2019 08:59 AM | A Fault alarm for RTU-1 at the building BetaSite located at 13600 Industrial Park Blvd, Plymouth, MN, 55441, United States on 08/10/2019 08:59:30 AM (CST) has occurred. Alarm: Low Discharge Air Temp | 08/13/2019 |
| 2 | RTU-2 | Alarm | 08/07/2019 11:37 PM | A Warning alarm for RTU-2 at the building BetaSite located at 13600 Industrial Park Blvd, Plymouth, MN, 55441, United States on 08/06/2019 10:48:17 PM (CST) has occurred. Alarm: Dirty Filter | 08/13/2019 |
| • | RTU-1 | Alarm | 08/02/2019 01:43 PM | A Problem alarm for RTU-1 at the building BetaSite located at 13600 Industrial Park Blvd, Plymouth, MN, 55441, United States on 08/02/2019 01:33:08 PM (CST) has occurred. Alarm: Inverter Compressor Problem | 08/02/2019 |
| • | RTU-1 | Alarm | 08/02/2019 01:34 PM | A Problem alarm for RTU-1 at the building BetaSite located at 13600 Industrial Park Blvd, Plymouth, MN, 55441, United States on 08/02/2019 01:33:08 PM (CST) has occurred. Alarm: Inverter Compressor Problem | 08/02/2019 |
| 2 | Main Office_AWV | Alarm | 08/02/2019 04:43 AM | A Fault alarm for Main Office_AWV at the building BetaSite located at 13600 Industrial Park Blvd, Plymouth, NN, 55441, United States on 08/02/2019 04:26:23 AM (CST) has occurred. Alarm: SHUTDOWN – Evaporator Pressure Low Circuit #2, Comp #1 | 08/02/2019 |
| 2 | Main Office_AWV | Alarm | 08/02/2019 04:26 AM | A Fault alarm for Main Office_AWV at the building BetaSite located at 13600 Industrial Park Blvd, Plymouth, NN, 55441, United States on 08/02/2019 04:26:23 AM (CST) has occurred. Alarm: SHUTDOWN – Evaporator Pressure Low Circuit #2, Comp #1 | 08/02/2019 |
| 2 | Engineering_AGZ | Alarm | 07/30/2019 11:08 AM | A Fault alarm for Engineering_AGZ at the building BetaSite located at 13600 Industrial Park Blvd, Plymouth, MN, 55441, United States on 07/30/2019 12:07:46 PM (EST) has occurred. Alarm: UNIT SHUTDOWN - Evaporator Water Flow Loss | 08/02/2019 |
| • | Main Office_AWV | Alarm | 07/29/2019 06:53 PM | A Fault alarm for Main Office_AWV at the building BetaSite located at 13600 Industrial Park Blvd, Plymouth, NN, 55441, United States on 07/29/2019 06:52:27 PM (CST) has occurred. Alarm: COMP SHUTDOWN - Oil Feed Pressure Sensor Fault Circuit #1, Comp #1 | 08/02/2019 |

Figure 15: View Messages

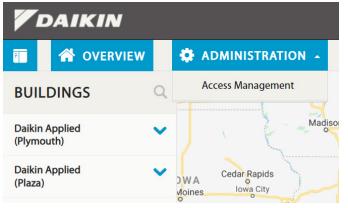


Administration Menu

The 'Administration' menu (Figure 16), which appears to the right of the Overview icon, allows the user to customize the display for a unit and to provide other users with access to units. There are two types of user roles defined within SiteLine:

- **Standard** allows access to equipment and buildings without the ability to invite new users, manage other users' access to equipment, or view building reports.
- Administrator (Admin) allows has Standard level access plus the ability to create new users, assign users to equipment, and view building and operational settings change reports.

Figure 16: Administration Menu



Access Management Menu

Selecting the 'Access Management' menu item from the 'Administration' menu allows the user to provide other users with access to units. This section also contains the functionality to edit unit tags. Only users with Admin access have the 'Access Management' menu available.

Assigning Users

Clicking the 'Access Management' menu opens the Access Management screen, which lists all units to which the current user has access (Figure 17). To provide a user access to a specific unit from this list, click the 'Invite User' button. This displays the 'Invite User' screen, which prompts the administrator to enter an e-mail address for the new user (Figure 18). After entering the e-mail address, clicking the search button to the right of the field begins a search for the user within the database. If the user does not exist in the database, a prompt appears asking to add the new user and decide the user's access level within SiteLine (Figure 19), Standard or Admin.

Figure 17: Access Management Menu

Access Management

| | Unit Tag | Serial Number | Building Name | Building Address |
|---|------------------|---------------|--------------------|--|
| → | Center East, M17 | FBOU860600823 | Fbo Addition Rebel | 300 24TH ST NW, FARIBAULT, MN, 55021, United States |
| → | DH005 | FBOU710501237 | Fbo Addition Rebel | 300 24TH ST NW, FARIBAULT, MN, 55021, United States |
| → | DH007 | FBOU510501242 | Fbo Addition Rebel | 300 24TH ST NW, FARIBAULT, MN, 55021, United States |
| → | North East, M19 | FBOU860600833 | Fbo Addition Rebel | 300 24TH ST NW, FARIBAULT, MN, 55021, United States |
| → | West, M18 | FBOU760600802 | Fbo Addition Rebel | 300 24TH ST NW, FARIBAULT, MN, 55021, United States |
| | | | | ⊷ ≪ Page 1 of 1 → ⊨ 10 ▼ |

Q Invite User

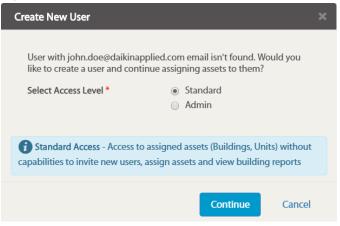
Figure 18: New User Email

Invite User

john.doe@daikinapplied.com

Q Cancel

Figure 19: User Access Level



On the Assign user screen (Figure 20), the selected user is shown, along with the user's level of access. For Standard users, the user's access to writable points must first be chosen. Access to writable points is defined as follows:

- Setpoint User will be able to edit only Setpoint Attributes
- Configuration User can edit only Configuration Attributes
- Both User can edit both Configuration and Setpoint Attributes
- None User has only read access to Configuration and Setpoint Attributes

For reference, a typical example of a Setpoint Attribute is

Figure 20: Assign User Screen

Assign User

| User, J - Daikin Applied john.doe@daikinapplied.com | Standard | Q |
|--|----------|---|
| Access to Writable Points | Setpoint | • |

Access to Units

Leaving Evaporator Water Setpoint on a chiller and a typical example of a Configuration Attribute is the Low OAT Lockout parameter on a chiller.

Next, the desired units must be chosen by clicking the check box to the left of the unit tag. Temporary unit access can be provided by clicking the 'Temporary' checkbox for the unit, then entering start and end dates. The user's unit access will expire automatically following the end date.

Once all units have been selected, clicking the 'Submit' button finalizes the process. A confirmation message appears at the top of the screen and the user will receive an email notification of the newly granted access.

| User Assigned | Temporary* | Start Date | End Date | Unit Tag 🗧 | Serial Number | Building Name | Building Address |
|--------------------------|------------|------------|----------|------------------|---------------|--------------------|--|
| | | | | Center East, M17 | FBOU860600823 | Fbo Addition Rebel | 300 24TH ST NW, FARIBAULT, MN, 55021, United States |
| | | | | DH005 | FBOU710501237 | Fbo Addition Rebel | 300 24TH ST NW, FARIBAULT, MN, 55021, United States |
| | | | | DH007 | FBOU510501242 | Fbo Addition Rebel | 300 24TH ST NW, FARIBAULT, MN, 55021, United States |
| | | | | North East, M19 | FBOU860600883 | Fbo Addition Rebel | 300 24TH ST NW, FARIBAULT, MN, 55021, United States |
| | | | | West, M18 | FBOU760600802 | Fbo Addition Rebel | 300 24TH ST NW, FARIBAULT, MN, 55021, United States |
| I ≪ Page 1 of 1 → → 10 ▼ | | | | | | | |

Edit Unit Tags

The default unit tags displayed in the SiteLine UI were defined at the time of initial order. However, the unit tags can be customized by a user with Admin access. Click the `Access Management' menu to open the Access Management screen, which lists all units available to the use. Click somewhere on the row of the unit requiring a Unit Tag name change (do not click on the Unit Tag link or Unit Address link). The row will highlight blue, and an `Edit Unit' button will display below the unit list (Figure 21). Click the `Edit Unit' button to display the Edit Unit Tag dialog box. In the `Current Unit Tag' field, change the name, then click the `Update' button (Figure 22). The equipment will now use the new unit tag name (Figure 23). To revert to the default Unit Tag name, open the Edit Unit Tag dialog box, then click on the `Set as Current' text and then click Update.

Figure 21: Unit LIst Editting

Access Management

| | Unit Tag | Serial Number | Building Name | Building Address |
|---|------------------------|---------------|--|---|
| ÷ | CH-6.3 | STNU211000148 | Daikin Applied (Plymouth) | 13600 INDUSTRIAL PARK BLVD, MINNEAPOLIS, MN, 55441, United States |
| ÷ | CHILLER NO.1 | STNU211160076 | Daikin Applied Faribault North Facility | 15620 Acorn Trail, Faribault, 55021, United States |
| ÷ | IE Retrofit Kit DPSA 4 | Y119H6A0020 | Daikin Applied Faribault North Facility | 15620 Acorn Trail, Faribault, 55021, United States |

Figure 22: Unit Tag Updating

| Edit Unit Tag | | × |
|--------------------|----------------|-------|
| | | _ |
| Current Unit Tag: | Chiller 6.3 | |
| Original Unit Tag: | CH-6.3 | |
| | Set as Current | |
| | Update Ca | ancel |

Figure 23: Unit Tag Updated

Access Management

| | Unit Tag | Serial Number | Building Name | Building Address |
|---|------------------------|---------------|--|---|
| → | Chiller 6.3 | STNU211000148 | Daikin Applied (Plymouth) | 13600 INDUSTRIAL PARK BLVD, MINNEAPOLIS, MN, 55441, United States |
| → | CHILLER NO.1 | STNU211160076 | Daikin Applied Faribault North Facility | 15620 Acorn Trail, Faribault, 55021, United States |
| → | IE Retrofit Kit DPSA 4 | Y119H6A0020 | Daikin Applied Faribault North Facility | 15620 Acorn Trail, Faribault, 55021, United States |
| | | | 14 | <+ Page 1 of 1 → → 100 × |

Q, Invite User

Reports Menu

Selecting 'Operational Activity and Settings Change' from the 'Reports' menu opens the Operational Activity and Settings Change Report screen (Figure 24). From this screen, the user can filter the display by user name, unit, action (such as login, setpoint changes, etc.), and building. "No filter" means no condition is selected. If the user wishes to see all results for a category, "All" needs to be selected.

The user can also filter by a specific date range, using the 'Time Period' configuration box. Once all filters are applied, clicking the 'Export' button generates the report in Comma-Separated Values (.csv) format.

Figure 24: Operational Activity and Settings Change Report Screen

Operational Activity and Settings Change Report

| User | All 🗸 | | Action | A | | |
|----------------------------|-----------|----------|--------------|-------------|------------------|--|
| Unit | All 🗸 | All 🗸 | | No filter 🗸 | | |
| C Export | | | | | Time Period | 🛗 Jan 1, 2022 - Jan 7, 2022 - |
| Date/Time | User Name | Unit Tag | Serial Numbe | · Building | Building Address | Action |
| 1/7/2022 2:57 PM | User, J | | | | | Portal Login as Daikin User |
| 1/7/2022 12:17 PM | User, J | | | | | Portal Login as Daikin User |
| I≪ ≪ Page 1 of 1 → F 100 V | | | | | | |

Overview Screen

Map View

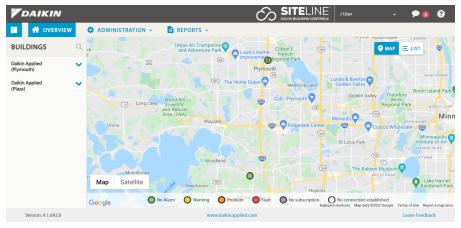
After logging into the SiteLine website, the user interface will initially display the Overview screen (Figure 25), which is a listing of all buildings having units associated with the user. By default, a Map View is displayed, showing the physical location of all user-associated buildings (Figure 26). Each dot indicates a building and the status of the equipment in the building. If the user has access to more than one building within a general area, the dot may contain a number representing the total of user-assigned buildings for that area (Figure 27). A key of the statuses is displayed at the bottom of the map (Figure 28). A green dot indicates no units in the building(s) have alarms. A vellow dot indicates that one or more units in the building(s) have warning alarms. An orange dot indicates that one or more units in the in the building(s) have problem alarms. A red dot indicates that one or more units in the in the building(s) have fault alarms. A gray dot indicates that one or more units in the in the building(s) has an inactive subscription (for example, due to an expiration).

Placing the cursor over an individual dot on the map will display a pop-up with information for the building and status for the units associated to the building (Figure 29).

NOTE: The informational pop-up will only display if the zoom is set at a level capable of distinguishing between multiple user-associated buildings. Clicking a unit's tag name in this pop-up will open the 'Unit Dashboard' for the unit, while clicking the building name will open the 'Building Dashboard'. Both dashboards are described in subsequent sections of this document. From any screen within the SiteLine user interface, clicking the 'Overview' icon or the 'Daikin' logo returns the user to the Overview screen.

By default, the map is scaled to display the dots for all userassociated buildings. Thus, the initial map scaling will vary between users depending on the number and location of their respective buildings. To navigate to a specific location on the map using a pc, click and hold on the map and drag it to the desired location. To zoom into a specific location on the map using a pc, double-click the desired location until the zoom reaches the desired scaling. To reset the zoom to full size, click the 'Overview' button or Daikin logo in the upper-left corner of the browser window (Figure 30).

Figure 25: Overview Screen







Alternatively, the scroll-wheel of the pc's mouse, if available, can also be used to zoom in and out within the map. To navigate to a specific location on a mobile device or touchscreen, place two fingers on the screen and drag them to the desired location (Figure 31). To zoom to a specific location on a mobile device or touchscreen, place two fingers on the screen near the desired location and spread the fingers apart to zoom in on the map or pull them together to zoom out on the map.

Figure 27: User-Assigned Building in an Area

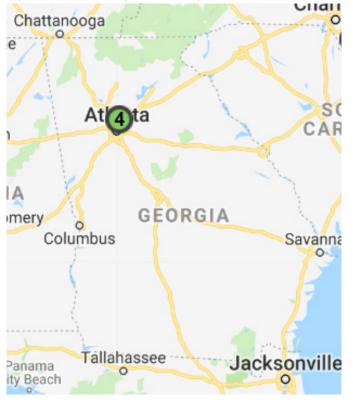


Figure 28: Key Status Data No Alarm Warning Problem Fault No subscription

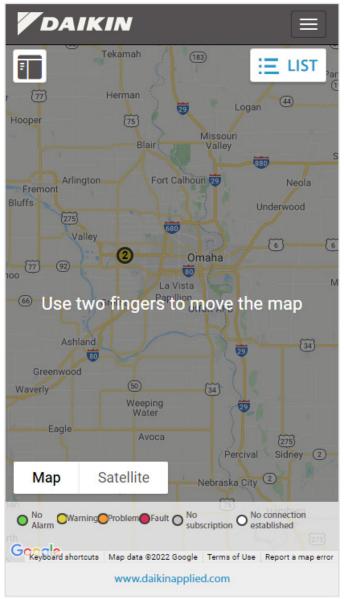
Figure 29: Unit Status for Assigned Building



Figure 30: Overview Icon



Figure 31: Touch Screen Navigation



List View

By clicking the 'List' button in the upper-right corner of the map (Figure 32), the Overview screen can also be displayed in List View (Figure 33), which shows all user-assigned units in a list format. In this view, units are grouped by type and identified by unit tag and building. In addition, several key operational indicators are displayed for each unit. Placing the cursor over the alarm icon to the left of the unit tag will display a message regarding any current alarms (Figure 34).

NOTE: Units integrated through SiteLine for Dedicated Equipment will use the unit's factory serial number, beginning with STNU for chillers or FBOU for rooftop units. Units integrated through SiteLine for Pre-Programmed BAS will have serial numbers beginning with SOLU.

Clicking a unit's tag name will open the Unit Dashboard for the unit, while clicking the building name will open the Building Dashboard. Both dashboards are described in subsequent sections of this document. Any units with expired subscriptions are displayed in red with a message indicating the subscription is inactive (Figure 35). No operational data is displayed for units with expired subscriptions. The user can return to Map View by clicking the 'Map' button.

If any units associated with the user have expired subscriptions, a message appears above the equipment list (Figure 36). Clicking the 'X' within the message closes the message until the next time the user logs into the user interface. Clicking the 'Show Details' link within the message expands the message to show a list of all units with expired subscriptions, along with a contact phone number for technical support. Clicking the 'Renewal Request' link opens the 'Request Subscription Renewal' message window (Figure 37). The user selects the units to renew, enters a contact email, contact phone, and any desired comments.

Figure 33: List View

Equipment List

| | | | | | | | | | | Туре | e to searc | h |
|-------|-----------------|----------------|--------------------------|---------|--------------------|---------|--------|--------------------------|----------|-------------------------------|-------------------|-------------|
| ir Co | oled Chiller | | | | | | | | | | | |
| | Unit Tag | | Building | | Act Setp Ter | oint | Enteri | orator ng Water mp | Leav | aporator ing Water Temp | Chiller Status | |
| | CH-1 | Daikin Applied | (Plymouth) ♀ | | 44.0 | D °F | 54 | .7 °F | 4 | 6.3 °F | Run | N/A |
| r Ha | ndling Unit | | | | | | | | | | | |
| | Unit | Tag | Bui | ilding | | | Ala | rm C | Discharg | e Air Temp | D | evice State |
| F | RTU 1 - Dock | | Daikin Applied (Plymout | h) 오 | | | 0 | | 54 | .7 °F | | Clg |
| | DPS 002 | | Daikin Applied (Plymout | h) 오 | | | 0 | | 56 | .7 °F | | Clg |
| aikin | VAV Controller | | | | | | | | | | | |
| | Unit Tag | | Building | Control | Temp | Control | Stpt | HeatCool | Mode | Occupancy | Mode | Air Volur |
| S | 5OLU2001P00002_ | 3101013 Dai | kin Applied (Plymouth) ♀ | 69.2 | °F | 70 °F | | HEAT | | DAY | | 3040 cf |
| S | SOLU2001P00002_ | 3101014 Dai | kin Applied (Plymouth) ♀ | 70 | ۶F | 73 °F | | HEAT | | DAY | | 2572 cf |
| 5 | 5OLU2001P00002_ | 3101015 Dai | kin Applied (Plymouth) ♀ | 71.8 | °F | 71 °F | | COOL | | DAY | | 496 cfr |
| s | 5OLU2001P00002_ | 3101021 Dai | kin Applied (Plymouth) ♀ | 71 | °F | 73 °F | | HEAT | | DAY | | 752 cfr |
| s | 50LU2001P00002 | 3101023 Dai | kin Applied (Plymouth) 오 | 68.8 | ۰E | 69 °F | | HEAT | | DAY | | 1476 cf |

Clicking the 'Send' button within the message window directs a message to the SiteLine support team. The user will subsequently be contacted with instructions for subscription renewal. Clicking the 'Cancel' button closes the message window without sending a renewal request.

If any units associated with the user have impending subscription expirations (within 90 days), a message appears above the equipment list (Figure 38). Clicking the 'X' within the message closes the message until the next time the user logs into the user interface. Clicking the 'Show Details' link within the message expands the message to show a list of all units with an impending subscription expiration, along with a contact phone number for technical support. Clicking the 'Renewal Request' link opens the 'Request Subscription Renewal' message window (Figure 39). The user selects the units to renew, enters a contact email, contact phone, and any desired comments. Clicking the 'Send' button within the message window directs a message to the SiteLine support team. The user will subsequently be contacted with instructions for subscription renewal. Clicking the 'Cancel' button closes the message window without sending a renewal request.

Figure 32: List View Button

Search 📀

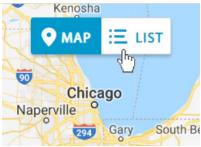


Figure 34: Current Alarms

| | Unit | Tag |
|----------------------|---------------|-----|
| • | CH-1 | |
| No Alarm | | |
| Alarm Cleared / No / | Active Alarms | |
| • | CH-2 001 | |

Figure 35: Subscription Status

| Unit Tag Building | Active Setpoint | Evaporator Entering | Evaporator Leaving | Chiller | Device |
|----------------------------------|---------------------------|---------------------|--------------------|---------|--------|
| | Temp | Water Temp | Water Temp | Status | Status |
| CH-7 Daikin Applied (Plymouth) 🔍 | Subscription is inactive. | | | | |

Figure 36: Subscription Expired Prompt



Figure 37: Renewal Request

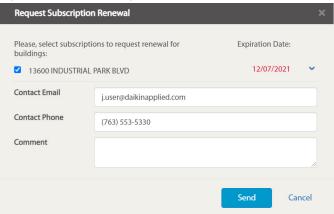


Figure 38: Subscription Near Expiration Warning

| A | Subscription is about to expire | ${oldsymbol{\mathcal{C}}}$ Renewal Request | × |
|---|---------------------------------|--|---|
| | show details | | |
| | | | |

Figure 39: Request Subscription Renewal

4

| Request Subscription | Renewal | | |
|--|--------------------------|------|--|
| Please, select units to re North East, M16 FBOU160688803, M16 N.E. F West, M18 FBOU160688802, M18 West | , | Exp | Diration Date: 02/06/2020 02/06/2020 |
| Contact Email | j.user@daikinapplied.com | | |
| Contact Phone | (763) 553-5330 | | |
| Comment | | | / |
| | | Send | Cancel |

Buildings List

By default, the user interface displays a 'Buildings List' to the left side of the Overview screen (Figure 40). This is a listing of all buildings having units associated with the user. Unlike the List View, the Buildings List has all available units grouped by building name. Clicking the arrow to the right of the building name expands the list to display all units (Figure 41), while clicking it a second time collapses the list (Figure 42). Specific buildings and units can be quickly located in the Building List using the search icon in the list header (Figure 43). Clicking the search icon opens a search field. Typing keyword text in the search field limits the list to buildings and units meeting the search parameters (Figure 44). This is especially helpful if the user has access to many buildings and units. Clicking the 'X' to the left of the search field closes the search function. Clicking a unit's tag name in the Buildings List will open the Unit Dashboard for the unit, while clicking the building name will open the Building Dashboard. Both dashboards are described in subsequent sections of this document. From any screen within the SiteLine user interface, clicking the 'Overview' icon or the 'Daikin' logo returns the user to the Overview screen.

If desired, clicking the Buildings List button (Figure 45) in the upper-left corner of the user interface hides the Buildings List (Figure 46). Clicking the button a second time displays the Buildings List.

Figure 40: Overview Screen

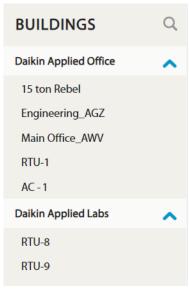


Figure 41: Building Name

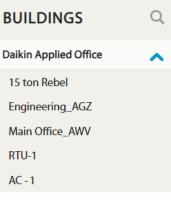


Figure 42: Collapsed Menu

| BUILDINGS | Q |
|-----------------------|---|
| Daikin Applied Office | ~ |
| Daikin Applied Labs | ~ |
| | |

Figure 43: Search Icon





Figure 44: Search Parameters

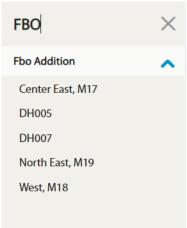
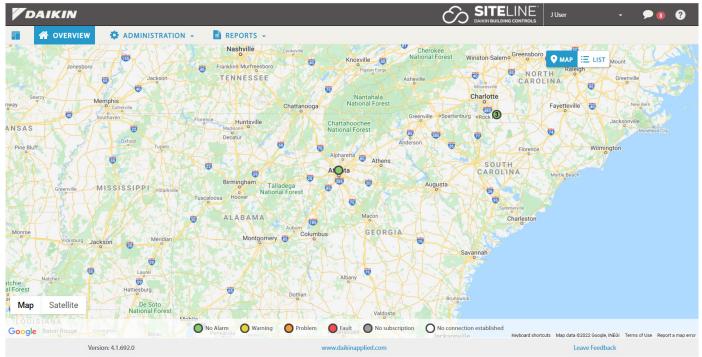


Figure 45: Building List Button



Figure 46: Building List Hidden

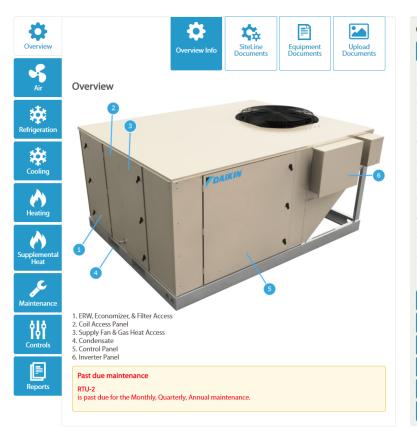


Unit Dashboard

The 'Unit Dashboard' (Figure 47) allows the user to view current unit status, review the unit alarm log, modify unit setpoints and control, and monitor unit live data. The Unit Dashboard is accessed by clicking the unit tag in the Map View, List View or Buildings List. Screen content is driven by button selections on the left of the User Interface (UI). The initial screen provides a comprehensive unit overview, with other buttons allowing the user to choose information specific to the condenser circuits, evaporator, maintenance recommendations, and unit controls. Not all button categories apply to all units.

Figure 47: Unit Dashboard

RTU-2



| Alarm Cleared / No Active Alarms | | | | |
|---|--|--|--|--|
| 🗐 Alarm Log | | | | |
| Standard Subscription expiration date 04/01/2022 is active | | | | |

| Overview Live Data | |
|-------------------------------|----------|
| Unit Overview | ^ |
| Device State: | Htg |
| Heating Status: | Enabled |
| Cooling Status: | OffAmb |
| Economizer Status: | None |
| Control Temp: | 66.1 °F |
| Discharge Air Temp: | 104.7 °F |
| Occ Mode: | Occ |
| Occ Source: | OccMode |
| Occ Status: | Осс |
| Return Air Temp: | 79.3 °F |
| Network Demand Shed Event: | Inactive |
| Power Usage | ~ |
| Economizer | ~ |
| Heating | ~ |
| Cooling | ~ |
| Refrigeration | ~ |
| About | ~ |

Alarm Log

The `Alarm Log' header (Figure 48) lists the highest priority active alarm within each category, Warnings, Problems, and Faults. Warning alarms are displayed with a yellow icon, problem alarms are displayed with an orange icon and faults are displayed with a red icon. If there are no active alarms, the icon will be green. Clicking the `Alarm Log' button allows the user to review a list of active and recent highest priority unit alarms (Figure 49). Each alarm provides a Date, User Name (if it was acknowledged or cleared), Alarm Type, and Alarm Status. If an alarm is no longer active and has been acknowledged, its status will show as, "Clear". If an alarm is still active, but has been acknowledged, its status should read, "Acknowledged". If an alarm is active and is not cleared by an attempted clear, its status will show as "Clear Attempt". SiteLine does not allow the user to reset all alarms remotely. Critical alarms, defined depending on equipment model, need to be cleared locally on the unit keypad. Clicking the `Unit Details' link returns the user to the Unit Dashboard.

Figure 48: Alarm Log Header

Alarms

Figure 49: Alarm Log

Alarm Cleared / No Active

📃 Alarm Log

Clicking the 'Acknowledge' button acknowledges whichever alarm is currently selected in the alarm list. Clicking the 'Send Message' button allows the user to send an e-mail notification to one or more e-mail addresses (Figure 50). In addition, clicking the 'Change' button for Alarm Escalation Rules allows the user to select a set of rules described in the "User Profile" section of this document.



| Send Message | | × |
|-----------------|-----------------------------------|---|
| То * | Separate email addresses with ';' | |
| Message Topic * | Select a message | ~ |
| Comment | Comment here. Max 1000 symbols. | |
| | | |

| Current Alarms | for RTU-2 | | | | Q Send Message |
|---------------------|------------------|----------------------------------|----------|---------------|--------------------------------|
| Alarm Cleared / I | No Active Alarms | | | | |
| Alarm Log (CST) | | | | | |
| Export | | | | From: | То: |
| Show Communication | on alarms | | | Fime Period : | |
| Date/Time | Туре | Alarm Description | Status | User | Access Level |
| 6/17/2021 8:57 AM | Unit Fault | Alarm Cleared / No Active Alarms | Resolved | N/A | |
| 6/17/2021 8:56 AM | Unit Fault | Emergency Stop Fault (250) | Alarm | N/A | |
| 5/10/2021 3:53 PM | Unit Warning | Alarm Cleared / No Active Alarms | Resolved | N/A | |
| 5/8/2021 3:11 PM | Unit Warning | Dirty Filter (24) | Alarm | N/A | |
| 11/28/2020 10:12 AM | Unit Problem | Alarm Cleared / No Active Alarms | Resolved | N/A | |
| 11/28/2020 10:00 AM | Unit Problem | Freeze Problem (197) | Alarm | N/A | |
| | | | | 14 | I << Page 1 of 1 ⇒ ⊨ 100 x |

Default Schedule

| Warning | Notify | After 1 Day | Escalate After | Neve |
|--|--------|--------------|----------------|------|
| Problem | Notify | Immediately | Escalate After | Neve |
| Fault | Notify | Immediately | Escalate After | Neve |
| Communication error to unit controller | Notify | Never | Escalate After | Neve |
| Gateway communication failure | Notify | After 1 Week | Escalate After | Neve |



Subscription Status

This section indicates the current subscription status for the unit (Figure 51).

Figure 51: Subscription Status

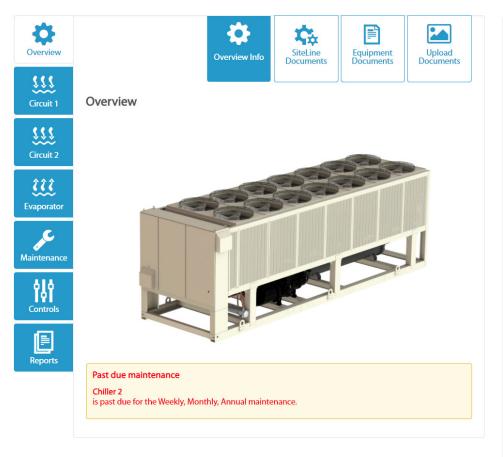
Standard Subscription expiration date 04/30/2023 is active

Overview Screen

With the 'Overview' button selected, a unit graphic is displayed (Figure 52). Depending on the type of unit selected, the user can monitor a variety of data points, such as statuses, temperatures, pressures, capacities, and power. Additionally, the data available to the UI varies depending on whether the unit is connected to the cloud using SiteLine for Dedicated Equipment or SiteLine for Pre-Programmed BAS. Not all data categories apply to all units.

NOTE: The unit graphics are specific to the unit being viewed, so may differ from the images shown in this manual.

Figure 52: Overview Screen



| Overview Live Data | |
|------------------------------------|---------|
| Unit Overview | ^ |
| Active Setpoint Temp: | 40.0 °F |
| Actual Capacity: | 0% |
| Capacity Limit Network: | 100 % |
| Capacity Limit: | 100 % |
| Chiller Status: | On |
| Cool Setpoint Network Temp: | 40.0 °F |
| Demand Limit: | 100 % |
| Evaporator Entering Water Temp: | 43.9 °F |
| Evaporator Leaving Water Temp: | 39.8 °F |
| Ice Setpoint Network Temp: | 25.0 °F |
| Run Enable: | On |
| Evaporator Delta Temp: | 4.1∆°F |
| Power Usage | ^ |
| About Chiller | ^ |

Upcoming and Past Due Maintenance

A description of 'Upcoming and Past Due Maintenance' is displayed beneath the unit graphic.

Overview Info

The 'Overview Info' button is selected by default and displays the unit graphic.

SiteLine Documents

Clicking the 'SiteLine Documents' button provides a list of manuals for the SiteLine hardware and software, along with hyperlinks to access these documents in the cloud.

Equipment Documents

Clicking the `Equipment Documents' button provides a list of manuals specific to the unit model, along with hyperlinks to access those documents in the cloud

Upload Documents

Clicking the 'Upload Documents' button allows the user to upload documents, such as image and text files, and save them to the cloud.

Unit Overview

Clicking the 'Unit Overview' header expands a list of current values for unit data points, such as statuses, temperatures, pressures, and capacities. Clicking the header a second time will collapse the list.

About Unit

Clicking the 'About Unit' header provides unit-specific information, such as the Unit GO (General Order) Number and Serial Number. Clicking the header a second time will collapse the list.

Power Usage

Clicking the 'Power Usage' header expands a list of current power-related operating parameters, including Meter Power, and Hourly, Daily and Weekly Power usage. Clicking the header a second time will collapse the list. Power data is not available for all units.

For centrifugal chillers, compressor power data is sent to SiteLine only if available at the local Human Machine Interface (HMI).

Unit Section Screens

Buttons on the left side of the Unit Dashboard allow the user to access information for specific unit sections, such as the circuits, evaporator, and condenser on chillers, or the fans, refrigeration, cooling and heating sections on rooftop units. Not all button categories apply to all units. With a specific section button selected (Figure 53, Figure 54, Figure 55 and Figure 56), a unit or section graphic is displayed. For each unit section, the user can monitor a variety of temperatures, pressures, statuses, and other pertinent data.



Figure 53: Example Circuit Screen (Air-cooled chiller)

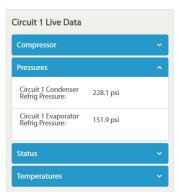
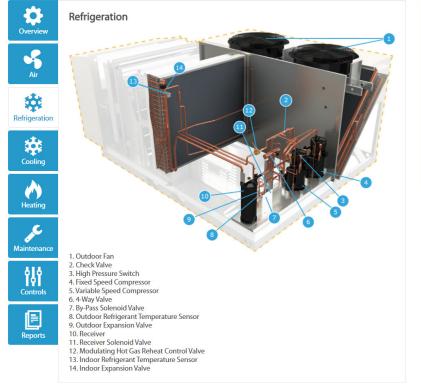


Figure 54: Example Refrigeration Screen (Rebel Rooftop Unit)



| Refrigeration Live Data | | | |
|-------------------------|----------|---|--|
| Unit Overview | | ^ | |
| Dehumid Status: | Inactive | | |
| Device State: | Htg | | |
| Device Status: | Enable | | |
| Sensors Setpoints | | ~ | |
| Measured Calculate | d | ~ | |
| Operating Hours | | ~ | |



Figure 55: Example Overview Screen – Variable Air Volume (VAV) Box

| Device Status | | |
|-------------------|----------|--|
| Control Temp: | 69.8 °F | |
| Control Stpt: | 70 °F | |
| HeatCool Mode: | HEAT | |
| Occupancy Mode: | DAY | |
| Air Volume: | 2772 cfm | |
| Control Flow Max: | 5000 cfm | |

Figure 56: Example Overview Screen – Water Source Heat Pump (WSHP)

| Overview | Overview Info Image: Constraint of the second sec | Ov U E |
|---------------|--|--------------|
| Refrigeration | | L |
| Maintenance | | |
| Reports | | |

| Overview Live Data | |
|-------------------------|----------|
| Unit Overview | ^ |
| Effective Occ: | Occupied |
| Occ Override: | Occupied |
| Unit Status: | Cool |
| Space Temp: | 75 °F |
| Effective SPT: | 73 °F |
| Leaving Water Temp: | 75.5 °F |
| Entering Water Temp: | 73.4 °F |
| Condensate Overflow: | Dry |
| Cooling | ~ |
| Heating | |

Maintenance Screen

With the 'Maintenance' button selected, the user can view past due and upcoming maintenance, log maintenance activity, and commission/recommission the unit (Figure 57).

Figure 57: Maintenance Screen

| \$ | <mark>) </mark> | Maintenance Live Data |
|-------------|--|--|
| Overview | Maintenance Log Commission / Info Maintenance | Unit Overview |
| Circuit 1 | Past due maintenance | Active Setpoint 43.9 °F Temp: |
| | Chiller 2 is past due for the Weekly maintenance. | Actual Capacity: 0 % |
| Circuit 2 | Date of last maintenance: 10/10/2021 | Capacity Limit 100 % |
| <u>;;;;</u> | Log Maintenance → | Capacity Limit: 100 % |
| Evaporator | Past due maintenance | Chiller Status: Off |
| ¢ | Chiller 2 is past due for the Monthly maintenance. Date of last maintenance: 10/10/2021 | Cool Setpoint 43.9 °F Network Temp: |
| Naintenance | Log Maintenance -> | Demand Limit: 100 % |
| Controls | Maintenance Information | Evaporator Entering 69.7 °F Water Temp: |
| | Weekly | Evaporator Leaving 43.9 °F Water Temp: |
| Reports | Monthly A General | Ice Setpoint Network 25.0 °F Temp: |
| | Complete unit log and review (Log readings can be taken daily for a higher level of unit observation) Visually inspect unit for loose or damaged components | Run Enable: Off |
| | Visually inspect components for signs of overheating Verify compressor heater operation | Evaporator Delta 25.8 Δ°F Temp: |
| | Refrigeration | |
| | Leak test Check sight glasses for clear flow | |
| | Check sign glasses for deal now Check filter-drier pressure drop (see manual for spec) | |
| | Annual 💙 | |
| | Update Periods | |

Maintenance Info

Clicking the 'Maintenance Info' button displays a list of upcoming maintenance and a list of recommended maintenance intervals.

At the bottom of the 'Maintenance Info' screen, there is a button to 'Update Periods'. By default, SiteLine uses the default factory maintenance recommendations for the specific unit type. If the user wishes to do maintenance on a different schedule, the maintenance periods can be modified by clicking the 'Update Periods' button. Once clicked, the user can select which maintenance period to edit, then choose a new maintenance period for each item in that list (Figure 58) Once changes are made, clicking the 'Submit Changes' button will save and apply them to the unit. From this screen, the user can also choose to add custom items to the maintenance list by clicking the 'Add Custom Items' button. The new item requires a description and type to be entered (Figure 59). If desired, the item can also be grouped by maintenance category. Clicking the 'Submit Changes' button saves the new maintenance item to the list (Figure 60). Event based maintenance items can be set with a custom threshold for specific data points to show maintenance information based on actual operation (Figure 61).

Figure 58: Edit Maintenance Period

| Overview | Mainte | C enance fo | Log Maintenance | Commission / Recommission |
|----------------------|--|--------------------------|--------------------|------------------------------|
| Air Refrigeration | Customize Maintenance Periods Use Weekly Monthly Bi-Monthly Quarterly Use Yearly Annual Not Applicable Event Based As Needed | | | |
| Heating | Description Inspect Filters | Group No C | p Group | |
| Maintenance | Inspect refrigerant sightglass and inspect for leaks if necessa | ary No G | Group | |
| Controls | Inspect condensate drain pan for residue and clean if necessary | | Group | |
| Reports | Inspect power and control voltages Inspect gas furnace | | Group | |
| | Inspect running amperage of all motors | No G | Group | |
| | Change Filter - Dirty Filter | No G | broup | |
| | Add Custom Items + | | Submit Chang | ges Cancel |

Figure 59: Create Custom Maintenance Item

| dd Custom Items + | | |
|-----------------------------------|---|---|
| Description | Туре | Group |
| Check for excess moisture in unit | Monthly Weekly Monthly Bi-Monthly Quarterly Twice Yearly Annual Not Applicable Event Based As Needed | ✓ No Group ✓ Remove > mit Changes Cance |

Figure 60: New Custom Maintenance Item

Maintenance Information

Monthly 🔷

- Inspect Filters
- Inspect refrigerant sightglass and inspect for leaks if necessary
- Inspect condensate drain pan for residue and clean if necessary
- Inspect power and control voltages
- Inspect gas furnace

~

- Inspect running amperage of all motors
- Change Filter Dirty Filter
- Check for excess moisture in unit

Quarterly

Annual 💙

Figure 61: Event Based Maintenance Report

| Please Specify | | |
|---|---------------|----------|
| Compressor 1 RunHours | | |
| Compressor 2 RunHours | | |
| Compressor 3 RunHours | | |
| Compressor 4 RunHours | | |
| Compressor 5 RunHours | | |
| Compressor 6 RunHours | | |
| Discharge Air Temp Cooling Sp | Туре | Group |
| Discharge Air Temp Heating Sp Economizer BunHours | Event Based | General |
| Economizer RunHours Entering Fan Leaving Coil Temp | Event Based 🗸 | General |
| Heating RunHours | | |
| Humidity | | |
| Mechanical Cooling RunHours | Condition | Value |
| Supply Fan RunHours | | |
| Compressor 1 RunHours | ✓ More than ✓ | 10000 h |
| | | |
| | | |
| dd Condition 🕂 | | 🔀 Remove |
| | | |
| | Sut | |

Log Maintenance

Clicking the 'Log Maintenance' button displays a maintenance log entry form (Figure 62) and a history of logged maintenance. First, the user must choose what type of maintenance to log, Weekly, Monthly, Annual, etc., then select the services that were performed. Additional fields to complete include, Service Date, Contact Number, Comments, and an indication of further service being required. An image file, such as a copy of a service order and picture taken at the field site can also be attached to the log entry. In addition, a notification e-mail message can be sent using the "Send Message" button. The entry is not recorded until the user clicks the 'Submit' button. The current user logged into the system is automatically tagged as having entered the maintenance issue. The history of logged maintenance appears at the bottom of the "Log Maintenance" screen (Figure 63). By default, a snapshot of current device values is saved with the entry. The user can choose not to have this done by clearing the checkbox prior to submitting the log entry.

Figure 62: Logging Maintenance



Log Maintenance

Fill out the required maintenance log, or view maintenance log history.

| The out the required maintenance log, of view | v manneenance is | nistory. | |
|---|------------------|--|--|
| Monthly | | | |
| Quarterly | | | |
| Annual | | | |
| Customer Call | | | |
| Inspect Filters | | ● Incomplete ○ Completed ○ Ignored | |
| Inspect refrigerant sightglass and inspect for necessary | leaks if | Incomplete ○ Completed ○ Ignored | |
| Inspect condensate drain pan for residue and necessary | l clean if | ● Incomplete \bigcirc Completed \bigcirc Ignored | |
| Inspect power and control voltages | | $ullet$ Incomplete \bigcirc Completed \bigcirc Ignored | |
| Inspect all temperature and pressure controls necessary | s. Adjust if | $lace$ Incomplete \bigcirc Completed \bigcirc Ignored | |
| Inspect gas furnace | | $ullet$ Incomplete \bigcirc Completed \bigcirc Ignored | |
| Inspect for proper superheat and subcooling | | ullet Incomplete $igcap$ Completed $igcap$ Ignored | |
| Inspect running amperage of all motors | | $ullet$ Incomplete \bigcirc Completed \bigcirc Ignored | |
| Inspect all operating temperatures and press | ures | ullet Incomplete $igcap$ Completed $igcap$ Ignored | |
| Verify that no moisture is accumulating in the | e unit | $ullet$ Incomplete \bigcirc Completed \bigcirc Ignored | |
| Clean water rinse for coils | | $ullet$ Incomplete \bigcirc Completed \bigcirc Ignored | |
| Change Filter - Dirty Filter | | $ullet$ Incomplete \bigcirc Completed \bigcirc Ignored | |
| Service Date * | 01/12/2022 | | |
| Employee Contact Number * | Employee Cor | ntact Number | |
| | Comments | | |
| Comments | commento | | |
| comments | | | |
| | | | |
| | Service is reg | uired? | |
| | | | |
| | Take a snapsł | not of current attribute values? 🧿 | |
| Upload an image: | | Browse | |
| | | | |
| | | Q Send Message Submit | |
| | | Jublin | |

Figure 63: Maintenance Log History

Maintenance Log

| Date | Employee Name | Employee Contact Number | Additional Service Required? | Report Type | View Details |
|------------|------------------|-------------------------------|------------------------------------|-----------------|-----------------|
| 01/12/2022 | User, J | 555-555-5555 | No | Maintenance | View Details |
| C | | | | 🖂 🖂 Page 1 of 1 | ▶> ▶1 100 ¥ |

Commission/Recommission

Clicking the 'Commission/Recommission' button (Figure 64) allows the user to complete a commissioning process for the equipment. The first time the process is completed, the 'Commissioning Procedure' button will be used to access the procedure. This will typically be done at unit start-up, but may be done later. The 'Recommission' button becomes active only after the commissioning procedure has been initially completed and submitted (Figure 65). Both processes are essentially identical, and follow the commissioning procedure provided in the IOM document for the equipment. By clicking either button, the user is presented with a number of screens containing an electronic commissioning form (Figure 66). The user should complete the required information on each screen, then click the `Next' button to switch to the subsequent page of the form. At any point, the user can click the `Save Progress' button to save and remain in the application, or the `Save and Close' button to save and return to the unit screen. At the bottom of the last screen of the commissioning form, the user must enter contact information, then click the `Submit' button to complete the commissioning/recommissioning procedure (Figure 67). The data is then stored in the cloud, and the commissioning report can be viewed or downloaded on the Reports/Service Logs screen.

Figure 64: Non-commissioned Unit

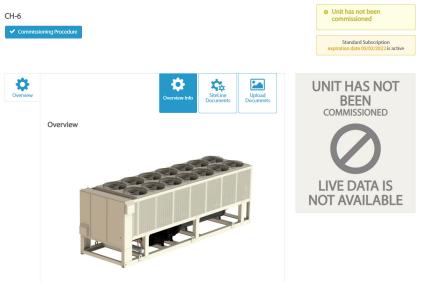


Figure 65: Recommission Button



Recommissioning Procedure

Selecting the 'Recommission' button will direct you to the recommissioning step by step procedure. Note: Upcoming Maintenance should be completed prior to starting the Recommissioning Process.

Recommission

Commission / Recommissioning Log

| Date | Employee Name | Employee Contact Number | Additiona I Service Required? | Report Type | Status | View Details |
|------------|------------------|-------------------------------|-------------------------------------|---------------|--------------|-----------------|
| 01/12/2022 | User, J | (555) 555-5555 | No | Commissioning | Successful | View Details |
| C | | | | ter ker Pa | age 1 of 1 🕞 | > »I 100 V |

Figure 66: Electronic Commissioning Form

Commissioning Procedures for CH-6

| Before Start-up Refrigeration System Design Controls Start - Up Non Microtech Readings Control Setpoints | Heat Recovery | General |
|--|---------------|---------|
| Metric Units English Units | | Next > |
| Commission has been performed outside SiteLine Application | | |
| Commission Date | | |
| II. Pre Start-Up Checklist Pre Start-Up Checklist, All NO checks require an explanation under "Description". Please check yes or no. | | |
| | YES | NO |
| A. Is the unit free of visible shipping damage, corrosion or paint problems? | 0 | 0 |
| B. Is unit installed level? | 0 | 0 |
| C. Does the unit meet all location, installation and service clearances per IM Bulletin? | 0 | 0 |
| D. Has thermostat bulb been properly installed in the well? | 0 | 0 |
| E. Are all set screws on all pulleys, bearings, and fans tight? | 0 | 0 |
| F. Does electrical service correspond to unit nameplate? | 0 | 0 |
| Volts Hertz Phase G. Has electrical service been checked for proper phasing at each circuit power terminal block? | 0 | 0 |

Figure 67: Commissioning Form Submission

| Performed By: | Title: | |
|-------------------------|------------|--|
| Company Name: | | |
| Address Line 1: | | |
| Country: | | |
| State: | City: | |
| Zip Code: | Telephone: | |
| Modem Number: | | |
| Signature: | Date: | |
| Contractor's Signature: | | |

| Save Progress Save and Close Subr |
|-----------------------------------|
|-----------------------------------|

Controls Screen

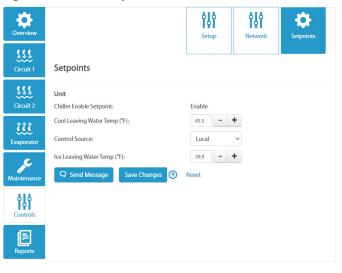
With the 'Controls' button selected, the user can modify a number of temperature, pressure, mode and capacity setpoints and configurations, and monitor live unit status, temperatures, pressures and capacities. Available setpoint and configuration parameters vary depending on the type of equipment. Additionally, the setpoints and configuration parameters available to the UI vary depending on whether the unit is connected to the cloud using SiteLine for Dedicated Equipment or SiteLine for Pre-Programmed BAS. Not all data categories apply to all units.

In general, setpoints are changed more frequently and are found under the 'Setpoints' header. Examples can include Evaporator Leaving Water Temperature setpoints, the Control Source and Unit Enable on chillers (Figure 68) and Discharge Air, Heating and Cooling Changeover, Humidity, Duct Pressure and Building Pressure setpoints on rooftop units (Figure 69). Configuration parameters (items that are typically set infrequently or only at the time of unit commissioning) are found under the 'Setup' or 'Operations' header. Examples can include design conditions, power conservation settings, stage timers, and alarm limits on chillers (Figure 70) and outside air damper control, fan setup and control, and high and low temperature limits on rooftop units (Figure 71 on page 35). Prior to making any setting changes, the user should be familiar with the operation manual for the unit and trained in its operation.

NOTE: The list of available setpoints and configuration parameters is more extensive for equipment using SiteLine for Dedicated Equipment than for equipment using SiteLine for Pre-Programmed BAS.

On each header, the user can modify the desired setpoints or configuration parameters. However, the changes do not take effect until the 'Save Changes' button is clicked (Figure 72 on page 35). Clicking 'Reset' reverts the settings to their previous values. If desired, clicking the 'Send Message' button allows the user to send an e-mail to inform others of changes. Hovering over the question mark icon will provide context specific help.

Figure 68: Chiller Setpoints Screen



For rooftop units using SiteLine for Dedicated Equipment, clicking the 'Capacity' button allows the user to monitor Cooling Capacity, Heating Capacity, and Economizer Capacity (Figure 73 on page 35). For chillers using SiteLine for Dedicated Equipment, clicking the 'Network' button allows the user to observe the current values of the network setpoints (Figure 74 on page 35). These read- only variables would normally be written via a third-party Building Automation System (BAS) using BACnet, LON, or Modbus.

Figure 69: Rooftop Unit Setpoints Screen

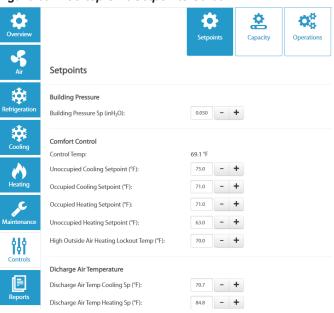


Figure 70: Chiller Setup Screen

| Overview | | setup | | Network | Setpoints |
|-------------|----------------------------------|---------|-----|---------|------------------|
| Circuit 1 | Setup | | | | |
| <u></u> | Power_Conservation | | | | |
| Circuit 2 | Demand Limit Enable: | Disable | ~ | | |
| <u></u> | High Integrated Part Load Value: | Disable | ~ | | |
| Evaporator | Leaving Water Temp Reset Enable: | Disable | ~ | | |
| Maintenance | Unit_Setup | | | | |
| የቆየ | Display Units: | English | ~ | | |
| Controls | Ext Fault Config: | Event | ~ | | |
| 1EI | Max Pulldown (°F/min): | 0.5 | - + | | |
| Reports | Stage Down Delay (s): | 30 | - + | | |
| | Stage Up Delay (s): | 240 | - + | | |
| | StopToStart Duration (min): | 5 | - + | | |

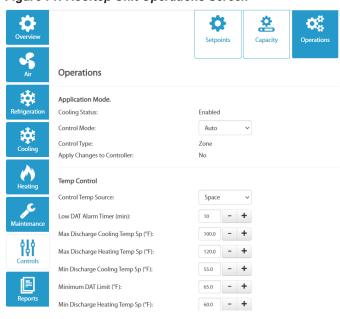


Figure 71: Rooftop Unit Operations Screen

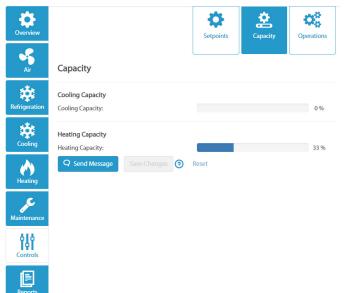
Figure 74: Chiller Network Screen

| Overview | | Setup | Network | \$ Setpoints |
|---------------------------|---|--------------------------------|---------|------------------------|
| Circuit 1 | Network | | | |
| Circuit 2 | Network_Setpoints Capacity Limit Network: | | | 100 % |
| ÇÇÇÇ Evaporator | Cool Setpoint Network Temp: Run Enable: Q Send Message Save Changes 3 | 44.6 °F RunAllowed Reset | | |

Figure 72: Save Changes Button



Figure 73: Rooftop Unit Capacity Screen



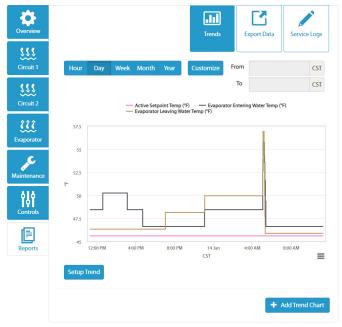
Reports Screen

With the "Reports' button selected, the user can view trended data for the current hour, day, month or year and can export this data for further analysis. In addition, they can view Maintenance and Remote Inspection Reports, along with Service Logs for the unit.

Trends

The 'Trends' button is selected by default and displays the trended data for the current day (Figure 75). Data can be viewed for the current hour, days, month or year by clicking the appropriate button. Clicking the 'Customize' button enables the Start and End fields, allowing the user to enter a trend for a specific range (Figure 76). Each equipment model has a default set of trend data points displayed, but more data points can be added to the graph by clicking the 'Setup Trend' button then selecting the desired additional points (Figure 77). Clicking the 'Add Trend Chart' button allows the user to create and display additional graphs. This is helpful, as only two types of data, such as pressures and temperatures, can be displayed on a single graph. All additional graphs can also be delete by clicking the "X" icon in the upper-right corner.

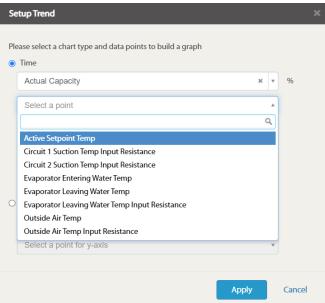
Figure 75: Current Day Trend Example



Q .11 Export D S Air 01/07/2022 12:00 AM CST From 01/08/2022 11:59 PM CST * < January 2022 Zone Air Temp Occ Cooling Sp (°F) - Zone Air Temp Occ He We Th Sa Su Мо Tu Fr 26 27 28 29 30 31 70 3 4 5 6 7 8 69 10 11 12 13 14 0 18 19 20 21 16 17 22 23 24 25 26 27 28 29 30 31 1 2 3 4 0 65 îţî = + Add Trend Cha

Figure 77: Trend Data Point Selection

Figure 76: Custom Date Range Example



Export Data

Clicking the 'Export Data' button (Figure 78) allows the user to export selected data points for a specific date range. The data is exported to a CSV file which can be saved to a local computer, tablet or smart phone. Files in CSV format can typically be opened by commercial spreadsheet software.

Clicking the 'New Export Data' button opens the Export Data Setup screen (Figure 79). By default, the 'Data Unit Log File' report type is selected. This report type allows the user to export all values for one or more data points during a selected timeframe. The data is reported sequentially within the log report, meaning it is a single stream of data point changes in the order in which they occurred. The user selects the time period in the 'From' and 'To' fields. Clicking in either field displays a calendar to use for selecting the date. Clicking the clock icon at the bottom of this calendar allows the user to select a specific time on that date (Figure 80). The user can select specific data points from the table. Clicking the 'Include All' box allows the user to quickly check or clear all data points within the table. When checked, the 'Show Selected' box filters the larger table to just those data points that are currently checked. Navigation arrows at the bottom of the data point table allow for movement between several pages within the table. The report is created by clicking the 'Request Data' button.

The 'Fixed Time Trend Report' allows the user to export data for one or more data points for a specific date/time range, and at specific intervals. Selecting the 'Fixed Time Trend Report' presents a drop-down menu for selecting the time interval (Figure 81). The report is created by clicking the 'Request Data' button. The user selects the time period in the 'From' and 'To' fields. Clicking in either field displays a calendar to use for selecting the date. Clicking the clock icon at the bottom of this calendar allows the user to select a specific time on that date. The user can select specific data points from the table. Clicking the 'Include All' box allows the user to quickly check or clear all data points within the table. When checked, the 'Show Selected' box filters the larger table to just those data points that are currently checked. Navigation arrows at the bottom of the data point table allow for movement between several pages within the table. The report is created by clicking the 'Request Data' button.

The 'Change of Value Trend Report' allows the user to export all changes of value for one or more data points for a specific date/time range. The user selects the time period in the 'From' and 'To' fields. Clicking in either field displays a calendar to use for selecting the date. Clicking the clock icon at the bottom of this calendar allows the user to select a specific time on that date. The user can select specific data points from the table. Clicking the 'Include All' box allows the user to guickly check or clear all data points within the table. When checked, the 'Show Selected' box filters the larger table to just those data points that are currently checked. Navigation arrows at the bottom of the data point table allow for movement between several pages within the table. The report is created by clicking the 'Request Data' button. Each data point receives its own column within the finished report (Figure 82), making the data set easy to graph using commercial spreadsheet software.

Figure 78: Export Data Screen

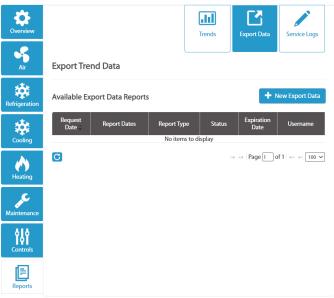


Figure 79: Export Data Setup Screen

| | Tren | - 1 | Export Data | Service Logs |
|--|-----------------------------|----------|-------------|-------------------|
| Export Trend Data | | | | |
| New Export Data Setup The requester will automatically be | sent a notification when th | e report | is ready | |
| | From | | То | |
| Time Period: | 01/14/2022 12:00 AM | | 01/14/2022 | 11:59 PM |
| Export Report Type: | Data Unit Log File | | | |
| Include Attributes for Expo | rt | | | Request Data |
| | Sub-System: | Grou | D: | nequest butu |
| Show Selected | None selected - | | None sele | cted - |

| clude All | Attribute Name | Attribute Sub System/Attribute Group |
|-----------|--|--|
| | Discharge Line Temp 1 | Additional Points/Additional Points |
| | Discharge Line Temp 2 | Additional Points/Additional Points |
| | Discharge Line Temp 3 | Additional Points/Additional Points |
| | Discharge Refrig Pressure | Refrigeration/Sensors Setpoints |
| | Discharge Refrig Pressure Circuit 1 | Cooling/Measured Calculated Cooling/Unit Overview |
| | Discharge Refrig Pressure Circuit 2 | Cooling/Measured Calculated Cooling/Unit Overview |
| | Discharge Refrigerant Pressure | Additional Points/Additional Points |
| | Discharge Sat Temp Diff | Additional Points/Additional Points |
| | Discharge Saturated Temp | Additional Points/Additional Points |
| | Discharge Sensor Fault | Additional Points/Additional Points |

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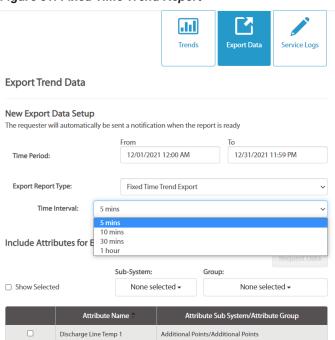
Figure 80: Date and Time Range Selection

| | < | | Jan | uary 2 | 022 | | > | | |
|--|---------|---------|---------|---------|---------|--------|---------|---------|--------------|
| | Su | Мо | Tu | We | Th | Fr | Sa | | |
| | 26 | 27 | 28 | 29 | 30 | 31 | 1 | ata | Service Logs |
| | 2 | 3 | 4 | 5 | 6 | 7 | 8 | | |
| | 9 | 10 | 11 | 12 | 13 | 14_ | 15 | | |
| Export Trend Data | 16 | 17 | 18 | 19 | 20 | 21 | 22 | | |
| | 23 | 24 | 25 | 26 | 27 | 28 | 29 | | |
| New Export Data Setup | 30 | 31 | 1 | 2 | 3 | 4 | 5 | | |
| The requester will automatically be se | r | | | ٩ | | | | | |
| Time Period: | 01/1 | 4/2022 | 2 12:00 | AM | | | 01/14 | /2022 1 | 1:59 PM |
| Export Report Type: | Data | Unit L | og File | 2 | | | | | ~ |
| Include Attributes for Export | | | | | | | | | Request Data |
| S | ub-Syst | em: | | | Gro | up: | | | |
| Show Selected | No | ne sele | ected | • | | | Nor | ne sele | cted 🗸 |
| Include All Attribute Na | ime 🕈 | | | Attr | ibute ! | Sub Sy | stem/ | Attribu | te Group |
| Discharge Line Temp | 1 | | Additi | onal Po | | | - LD- i | ate | |

| • | • | • | |
|-----------------|-------------------------|-----------------|-----------------------|
| Time Stamp | Discharge Air Temp (°F) | Time Stamp | Outside Air Temp (°F) |
| 12/1/2021 14:43 | 52.3 | 12/1/2021 2:33 | 39.7 |
| 12/1/2021 18:02 | 50.5 | 12/1/2021 5:35 | 38.8 |
| 12/1/2021 19:05 | 48.6 | 12/1/2021 6:04 | 37.9 |
| 12/1/2021 21:44 | 50.5 | 12/1/2021 6:37 | 37 |
| 12/2/2021 0:06 | 52.3 | 12/1/2021 7:25 | 36 |
| 12/2/2021 2:10 | 50.5 | 12/1/2021 8:19 | 37 |
| 12/2/2021 3:25 | 48.6 | 12/1/2021 8:21 | 37.9 |
| 12/2/2021 8:41 | 50.5 | 12/1/2021 9:07 | 38.8 |
| 12/4/2021 17:37 | 54 | 12/1/2021 9:19 | 39.7 |
| 12/4/2021 17:43 | 55.8 | 12/1/2021 9:33 | 40.7 |
| 12/5/2021 0:27 | 53.5 | 12/1/2021 9:47 | 41.6 |
| 12/5/2021 0:33 | 55.4 | 12/1/2021 10:27 | 42.5 |
| 12/5/2021 1:09 | 53.5 | 12/1/2021 10:56 | 43.4 |
| 12/5/2021 1:19 | 55.4 | 12/1/2021 11:13 | 44.3 |
| 12/5/2021 4:13 | 53.5 | 12/1/2021 11:17 | 45.3 |
| 12/5/2021 4:18 | 55.4 | 12/1/2021 11:23 | 46.2 |
| 12/5/2021 5:17 | 53.5 | 12/1/2021 12:41 | 47.1 |
| 12/5/2021 5:21 | 55.4 | 12/1/2021 12:58 | 48 |
| 12/5/2021 9:35 | 57.2 | 12/1/2021 13:06 | 48.9 |
| 12/5/2021 11:24 | 59.1 | 12/1/2021 13:55 | 49.8 |
| 12/5/2021 13:20 | 57.2 | 12/1/2021 14:43 | 50.7 |
| 12/5/2021 14:38 | 59.1 | 12/1/2021 16:02 | 49.8 |
| 12/5/2021 14:56 | 57.2 | 12/1/2021 18:01 | 48.9 |
| 12/5/2021 15:11 | 55.4 | 12/1/2021 18:35 | 48 |
| 12/5/2021 15:35 | 53.5 | 12/1/2021 19:03 | 47.1 |
| 12/5/2021 16:28 | 51.7 | 12/1/2021 19:20 | 46.2 |
| 12/5/2021 19:59 | 49.9 | 12/1/2021 19:34 | 45.3 |
| 12/5/2021 20:03 | 51.7 | 12/1/2021 19:43 | 46.2 |

Figure 82: Change of Value Trend Report

Figure 81: Fixed Time Trend Report



Additional Points/Additional Points

Discharge Line Temp 2

Service Logs

Clicking the `Service Logs' button allows the user to view a list of all service logs and commissioning procedures that have been performed using the Maintenance feature of SiteLine (Figure 83). For each item in the table, clicking the `View Details' link opens a pop-op window with a list of all services performed, and allowing the user to download a snapshot of the unit values when the service item was entered (Figure 84).

Figure 83: Service Logs



Service Logs

| Date | Employee Name | Employee Contact Number | Additional Service Required? | Report Type | View Details |
|------------|------------------|-------------------------------|------------------------------------|-----------------|-----------------|
| 01/12/2022 | User, J | (555) 555-5555 | No | Commissioning | View Details |
| C | | | | 📧 < Page 1 of 1 | ⇒ ⇒i 100 ¥ |

Figure 84: Service Log Details

| Details | × |
|--|---|
| The Unit RTU 1 - Dock has been commissioned by User, J Date: 01/12/2022 | |
| Employee Name: User, J | |
| Employee Phone Number: (555) 555-5555 | |
| Download a Report: Commissioning Report 01_12_2022 for Unit RTU 1 - Dock.docx | |
| Close | |

Building Dashboard

The 'Building Dashboard' (Figure 85) displays the building critical information, including building status information, maintenance items, weather forecast, and sustainability metrics. In addition, the user can choose to view unit-specific data and add/remove widgets to the building dashboard. Widgets are added and removed by clicking the 'Show/Hide Widgets' icon in the upper-right corner of the dashboard, then clicking the checkbox next to the desired widgets (Figure 86). Not all widgets apply to individual equipment types; a message appears when the user places the cursor over a widget that is not applicable

for the equipment. Once a widget is displayed, clicking and dragging its header allows the user to reorganize the building dashboard display.

NOTE: The following widgets are temporarily disabled.

- · Financial Summary
- Performance Index
- · Comfort Index
- Equipment Metrics
- · Sustainability Index

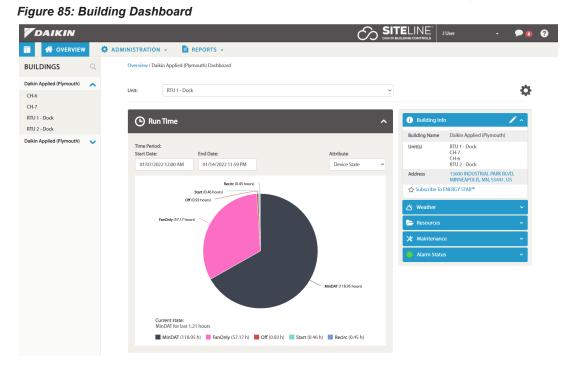
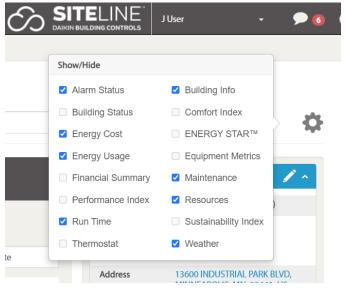


Figure 86: Show/Hide Widgets



Building Status

The 'Building Status' portion of the Building Dashboard displays basic utility usage information as well as overall building ENERGY STAR Score. The information in this portion of the dashboard can only be generated by clicking the 'Subscribe To ENERGY STAR' button, and entering general building and utility information (Figure 87). Once all information is entered on all three tabs, clicking the 'Save' button returns the user to the Building Dashboard. Clicking the 'Cancel' button cancels any changes.

Figure 87: Subscribe to Energy Star

Subscribe To ENERGY STAR

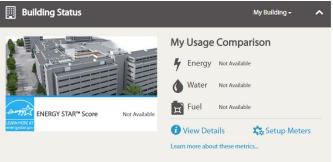
< Back

| ENERGY STAR [™] Information | | | |
|--|--------------|---------------------------|-------------------|
| \bigcirc Existing Property in SiteLine | | | Select Property |
| O Import from ENERGY STAR Por More Info | tfolio Manag | ger | |
| New Property | | | |
| Organization | Requ | uired Information | Basic Information |
| Organization | n Name * | | |
| Primary Business or | Service * | Select Business or Servic | e v |
| C | Country * | Select Country | ~ |
| Street A | Address * | | |
| | City * | | |
| Zip/Post | al Code * | | |
| Phone N | lumber * | | |
| | Fax | | |
| V | Vebsite | | |
| Is your organization an ENERGY S | TAR Partner | ? 🔿 Yes 💿 No | |
| | | | Next > |
| | | | Save Cancel |

When a building is created in SiteLine, and ENERGY STAR data entered, a corresponding building is automatically created in ENERGY STAR Portfolio Manager. For questions on accessing Portfolio Manager, please contact Daikin Applied Controls Technical Support.

Once the building is subscribed to ENERGY STAR's Portfolio Manager, 'View Details' and 'Setup Meters', appear in the Building Status section (Figure 88). Clicking 'View Details' directs the user the 'ENERGY STAR Information' screen, which allows the user to update property information, add meters, and set energy targets. Clicking the 'Setup Meters' button takes the user directly to the 'Meters & Consumption' tab of the 'ENERGY STAR Information' screen. Until usage data is uploaded, the corresponding fields will read, "Not Available".

Figure 88: Building Status Following Addition of Building Details



Setup Meters

The 'Meters & Consumption' tab of the 'ENERGY STAR Information' screen (Figure 89) allows the user to add their utility meter information. The user must first add the desired meter by clicking the corresponding 'Add' button, then give the meter a name (Figure 90). Once all desired meters are added and given names, clicking the 'Submit' button provides each of the meters with an 'Upload Data' button (Figure 91). All data must be uploaded using the template provided by clicking the 'Download Template' button (Figure 92). The template is in Comma-Separated Values (.csv) format and can be edited using several readily available spreadsheet software programs.

Once all data is entered into the template, the file should be saved. Following this, clicking the 'Upload Data' opens a dialog box, allowing the user to navigate to and select the desired file. Once the file is selected, the upload begins immediately, and a confirmation message appears when complete (Figure 93 on page 43). After all desired meter data is uploaded, clicking the 'Building' link near the top of the screen returns the user to the 'Building Dashboard'. An ENERGY STAR score should now be calculated, and all meters with uploaded data should display usage comparison to the previous month or year (Figure 94 on page 43). If enough data is available, the comparison will be year-over-year.

Figure 89: Meters and Consumption Tab

| ease upload energy and/or v utton to download it. Please, Download Template | | | mplate. Click on "Download Ten for consumption. | iplate" |
|---|--|-------------------------------|--|---------|
| lease be informed that CSV f | iles only are allowed to uplo | ad. You should upload one fi | ile per a meter. | |
| incorrect values, e | | mance values, Financial Infor | ENERGY STAR. In case of providi rmation, Sustainability Index, Us ink you. | |
| heck Meters you would like | to be included in ENERGY ST | AR values calculation: | | |
| Electric Grid Meters | | | | |
| Please be informed is kWh (thousand) | d that a unit of measurement Vatt-hours). | for Electric Grid Meters | + Add | |
| a Natural Gas Meters | | | | |
| Please be informer cf (cubic feet). | d that a unit of measurement | for Natural Gas Meters is | + Add | |
| Water Meters for Prop | erty | | | |
| Please be informer cf (cubic feet). | d that a unit of measurement | for Water Grid Meters is | + Add | |
| Sample property | | | | |
| Use sample prope | ty values for building | | ○ Yes ● No | |
| o set up meters for other end | ergy and/or water sources, pl | ease contact Daikin Applied | | |

Figure 90: Adding a Meter

| Electric | Grid | Meters | |
|----------|------|---|----------|
| | | Main Electric | - Remove |
| | | e be informed that a unit of measurement for Electric Grid Meters h (thousand Watt-hours). | + Add |

Figure 91: Upload Data Button

Electric Grid Meters

| Main Electric | 📤 Upload |
|---|----------|
| e be informed that a unit of measurement for Electric Grid Meters n (thousand Watt-hours). | + Add |

Figure 92: Download Template button

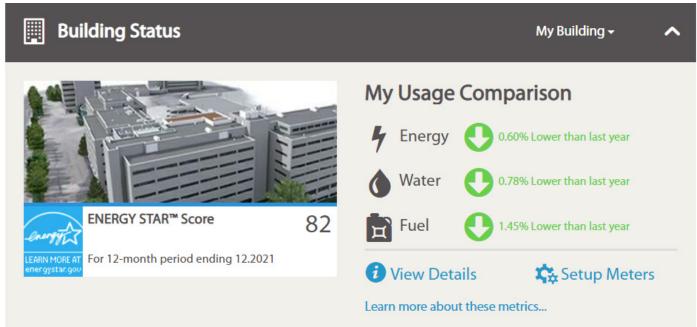
| Organization Information | Property Information | Meters & Consumption | Targets | |
|--------------------------|----------------------|---|---------|---|
| | 1 | per a meter according to temp te data or add new records for a | | the second se |

Download Template

Figure 93: Consumption Data Upload Successful



Figure 94: Usage Comparison Following Data Upload



The user can also choose to display a 'Target ENERGY STAR' score by choosing this option on the 'Targets' tab of the 'ENERGY STAR Information' screen. Click the 'View Details' button, then select the 'Targets' tab. The user then clicks the 'Edit' button, which makes the 'Target Metric' field editable. The user can choose from three different reports; Target ENERGY STAR Score, Target Percentage better than Baseline, and Target Percentage better than Median (Figure 95). The Target Percentage better than Baseline option makes a comparison between current and baseline performance. The Target Percentage better than Median option makes a comparison between the current building's performance and that of similar size and usage characteristics.

Once the 'Target Metric' is decided, the user must then enter a 'Target Value' for the metric. Clicking the 'Save' button sets the target. After this, clicking the 'Building' link near the top of the screen returns the user to the 'Building Dashboard', where the 'Target Score' should now be visible (Figure 96).

NOTE: If the user wishes to preview the dashboard with sample values, rather than uploading meter data, set the 'Sample Property' field on the 'Meters & Consumption' tab to 'Yes' and click 'Submit'. The dashboard will now display data from a sample building (Figure 97).

Figure 95: Choosing a Target Metric

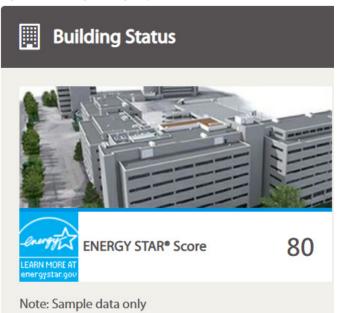
ENERGY STAR™ Information

| Organization Information | Property Information Meters & Consumption | Targets | | |
|--------------------------|---|---------|------|-------|
| | | | | |
| Target Metric * | Target ENERGY STAR Score | ~ | | |
| | No Target | | | |
| Target Value * | Target ENERGY STAR Score | | | |
| | Target % Better than Baseline | | | |
| | Target % Better than Median | | Save | Cance |

Figure 96: Target Score



Figure 97: Sample Property



Run Time

The 'Run Time' section of the Building Dashboard (Figure 98) displays key run time parameters for the selected equipment. Selecting a parameter from the 'Attribute' menu will update the graph to display that attribute. The current state of the selected attribute is displayed under the graph. By default, the graph is displayed for the current week, but the Time Period can be changed by selecting a new Start and End Date. If the building has more than one unit, the user must select the desired unit from the 'Unit' list in the upper-left corner of the building dashboard (Figure 99).

Figure 98: Run Time Widget

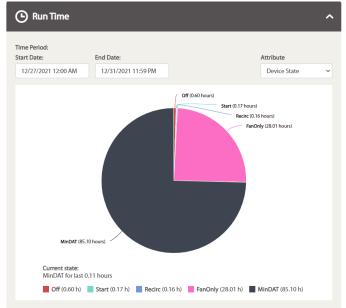


Figure 99: Unit List Selection

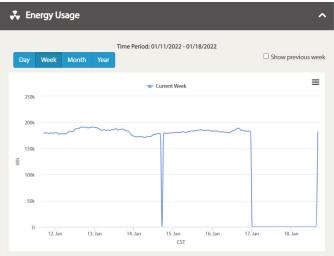
Overview / Daikin Applied (Plymouth) Dashboard

| Unit: | RTU 1 - Dock | ~ |
|-------|--------------|---|
| | RTU 1 - Dock | |
| | RTU 2 - Dock | |
| | CH-6 | |
| | CH-7 | |

Energy Usage

The 'Energy Usage' section of the Building Dashboard (Figure 100) displays a graph of the current energy usage for the chosen unit. The information is only available for units with optional energy monitoring. By clicking the appropriate button, the user can choose to display the energy usage trend for the current day, week, month, or year. By default, the current week button is selected. Clicking the 'Show Previous' box will display an additional graph for the previous day, week, month, or year, depending on the button selected.

Figure 100: Energy Usage Widget



Building Info

The 'Building Info' header of the Building Dashboard displays the Building name, building address, and all units currently available for the building (Figure 101). Clicking the edit icon allows the user to change the building name. Clicking the header once expands the data for display, while clicking it a second time collapses it.

Figure 101: Building Info

| i Building Info | Ø n |
|-----------------|---|
| Building Name | Daikin Applied (Plymouth) |
| Unit(s) | RTU 1 - Dock RTU 2 - Dock CH-6 CH-7 |
| Address | 13600 INDUSTRIAL PARK BLVD, MINNEAPOLIS, MN, 55441, US |

Weather

The 'Weather' header of the Building Dashboard displays current weather conditions as well as a weather forecast (Figure 102). A link is also provided to check the weather online. Clicking the header once expands the data for display, while clicking it a second time collapses it.

Figure 102: Weather



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ENERGY STAR®

The 'ENERGY STAR' header of the Building Dashboard displays the current calculated ENERGY STAR score for the building, and a comparison to a typical building. This section also provides Performance and Financial data (Figure 103). It is important to remember that no calculations can be made without the user entering meter data. Clicking the 'ENERGY STAR' header once expands the data for display, while clicking it a second time collapses it.

Figure 103: ENERGY STAR Performance and Financial Data



Resources

The 'Resources' header of the Building Dashboard displays a list of links to resources on Green Buildings. This section also provides Performance and Financial data (Figure 104). Clicking the 'Resources' header once expands the data for display, while clicking it a second time collapses it.

Figure 104: Resources on Green Buildings



- Leadership in Energy & Environmental Design (LEED)
- Green Building Initiative (GBI)
- International Green Construction Code (IgCC)

Energy Cost

The 'Energy Cost' header of the Building Dashboard displays a calculated energy cost for the unit selected from the 'Unit' list in the upper-left corner of the building dashboard. The data is displayed in the form of a bar chart. The cost is determined by the actual unit energy usage measured by the unit's energy management module, and the 'Energy Rate', measured in dollars per kilowatt hour (\$/kWh), entered by the user (Figure 105). By clicking the appropriate button, the user can choose to display the energy usage trend for the current day, week, month, or year. By default, the current week button is selected. Clicking the 'Show Previous' box will display an additional chart for the previous day, week, month, or year, depending on the button selected.





Q Send Message

Maintenance

The 'Maintenance' section of the Building Dashboard (Figure 106) displays a notification of any upcoming or past due maintenance items. By clicking the 'View Details' link under the 'Maintenance' item, the user can access the Maintenance Details for the building (Figure 107). Any recommended maintenance is listed for each unit, and a history of maintenance logs for the building is presented. To search for logs during a specific time frame, the user only needs to enter a start and end date, after which, the UI will automatically refresh to display only log items occurring between those dates.

Figure 106: Maintenance Notification



Figure 107: Maintenance Details

View Maintenance Details
ACC-1 Unit



| Unit Tag | Date | Employee Name | Employee Contact Number | Additional Service Required? | Report Type | View Details |
|----------|------------|---------------|-------------------------|---------------------------------|---------------|----------------|
| ACC-1 | 11/20/2021 | User, J | (555) 555-5555 | No | Maintenance | View Details |
| ACC-1 | 01/20/2021 | User, J | (555) 555-5555 | No | Commissioning | View Details |
| | | | | | 🖙 🛹 Page 1 | of 1 ⊨ ⊨ 100 ∨ |

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Alarm Status

The 'Alarm Status' section of the Building Dashboard (Figure 108) displays a list of any active alarms. By clicking the 'View Details' link under the Alarms section, the user is directed to more detailed unit information, including the alarm state for all units, general unit operation information for all units, and subscription status for all units (Figure 109).

Figure 108: Alarm Status

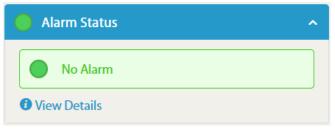


Figure 109: Unit Status Details

Units Status for Solutions Plaza

Alarm Information

| | Unit Tag | Short Description | Time |
|--|----------|----------------------------------|-------------------|
| | ACC-1 | Alarm Cleared / No Active Alarms | 1/19/2022 1:35 PM |

General Information

Air Cooled Chiller

| Unit Tag | Alarm Status | Active Setpoint Temp | Evaporator Entering Water Temp | Evaporator Leaving Water Temp | Chiller Status | Device Status |
|----------|--------------|----------------------|-----------------------------------|----------------------------------|----------------|---------------|
| ACC-1 | • | 46.0 °F | 54.2 °F | 45.7 °F | Run | Auto |

Subscription Status

| Unit Tag | Subscription Type | Status | Expiration Date |
|----------|-------------------|--------|-----------------|
| ACC-1 | Standard | Active | 4/29/2022 |

Thermostat

The 'Thermostat' widget of the Building Dashboard (Figure 110) provides a graphical representation of the local thermostat control on a single-zone Daikin device. Examples of zone level devices include, Single Zone RTU, VAV, Thermostat, and WSHP's. The widget provides information about unit mode, fan status, occupancy status, space temperature, and space temperature setpoint. If the unit is in unoccupied mode, the unit can by overrider to an occupied state by clicking the 'Occupancy Override' button. The space temperature setpoint can be adjusted by clicking the up or down arrows to raise or lower the setpoint value. The setpoint is constrained by high and low limits set at the local zone level device. All other parameters displayed in the 'Thermostat' widget are not adjustable. The 'Thermostat' widget is only used for Daikin devices.

Figure 110: Thermostat" Widget





Daikin Applied Training and Development

Now that you have made an investment in modern, efficient Daikin equipment, its care should be a high priority. For training information on all Daikin HVAC products, please visit us at www.DaikinApplied.com and click on Training, or call 540-248-9646 and ask for the Training Department.

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